

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

Amendments to the Claims

Claim 1 (Previously presented): Seed of maize inbred line designated PH3PG, representative seed of said line having been deposited under ATCC Accession No. PTA-4260.

Claims 2-59 (Canceled)

Claim 60 (New): A maize plant, or a part thereof, produced by growing the seed of claim 1.

Claim 61 (New): The maize plant of claim 60 wherein said plant has been detasseled.

Claim 62 (New): A tissue culture of regenerable cells produced from the plant of claim 60.

Claim 63 (New): Protoplasts produced from the tissue culture of claim 62.

Claim 64 (New): The tissue culture of claim 62, wherein cells of the tissue culture are from a tissue selected from the group consisting of leaf, pollen, embryo, root, root tip, anther, silk, flower, kernel, ear, cob, husk and stalk.

Claim 65 (New): A maize plant regenerated from the tissue culture of claim 62, said plant having all the morphological and physiological characteristics of inbred line PH3PG, representative seed of said line having been deposited under ATCC Accession No. PTA-4260.

Claim 66 (New): A method for producing an F1 hybrid maize seed, comprising crossing the plant of claim 60 with a different maize plant and harvesting the resultant F1 hybrid maize seed.

Claim 67 (New): A method of producing a male sterile maize plant comprising transforming the maize plant of claim 60 with a nucleic acid molecule that confers male sterility.

Claim 68 (New): A male sterile maize plant produced by the method of claim 67.

- Claim 69 (New): A method of producing an herbicide resistant maize plant comprising transforming the maize plant of claim 60 with a transgene that confers herbicide resistance.
- Claim 70 (New): An herbicide resistant maize plant produced by the method of claim 69.
- Claim 71 (New): The maize plant of claim 70, wherein the transgene confers resistance to an herbicide selected from the group consisting of: imidazolinone, sulfonylurea, glyphosate, glufosinate, L-phosphinothricin, triazine and benzonitrile.
- Claim 72 (New): A method of producing an insect resistant maize plant comprising transforming the maize plant of claim 60 with a transgene that confers insect resistance.
- Claim 73 (New): An insect resistant maize plant produced by the method of claim 72.
- Claim 74 (New): The maize plant of claim 73, wherein the transgene encodes a *Bacillus thuringiensis* endotoxin.
- Claim 75 (New): A method of producing a disease resistant maize plant comprising transforming the maize plant of claim 60 with a transgene that confers disease resistance.
- Claim 76 (New): A disease resistant maize plant produced by the method of claim 75.
- Claim 77 (New): A method of producing a maize plant with decreased phytate content comprising transforming the maize plant of claim 60 with a transgene encoding phytase.
- Claim 78 (New): A maize plant with decreased phytate content produced by the method of claim 77.
- Claim 79 (New): A method of producing a maize plant with modified fatty acid metabolism or modified carbohydrate metabolism comprising transforming the maize plant of claim 60 with

a transgene encoding a protein selected from the group consisting of stearyl-ACP desaturase, fructosyltransferase, levansucrase, alpha-amylase, invertase and starch branching enzyme.

Claim 80 (New): A maize plant produced by the method of claim 79.

Claim 81 (New): The maize plant of claim 80 wherein the transgene confers a trait selected from the group consisting of waxy starch and increased amylose starch.

Claim 82 (New): A maize plant, or part thereof, having all the physiological and morphological characteristics of the inbred line PH3PG, representative seed of said line having been deposited under ATCC Accession No. PTA-4260.

Claim 83 (New): A method of introducing a desired trait into maize inbred line PH3PG comprising:

(a) crossing PH3PG plants grown from PH3PG seed, representative seed of which has been deposited under ATCC Accession No. PTA-4260, with plants of another maize line that comprise a desired trait to produce F1 progeny plants, wherein the desired trait is selected from the group consisting of male sterility, herbicide resistance, insect resistance, disease resistance and waxy starch;

(b) selecting F1 progeny plants that have the desired trait to produce selected F1 progeny plants;

(c) crossing the selected progeny plants with the PH3PG plants to produce backcross progeny plants;

(d) selecting for backcross progeny plants that have the desired trait and physiological and morphological characteristics of maize inbred line PH3PG listed in Table 1 to produce selected backcross progeny plants; and

(e) repeating steps (c) and (d) three or more times in succession to produce selected fourth or higher backcross progeny plants that comprise the desired trait and all of the physiological and morphological characteristics of maize inbred line PH3PG listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.

Claim 84 (New): A plant produced by the method of claim 83, wherein the plant has the desired trait and all of the physiological and morphological characteristics of maize inbred line PH3PG listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.

Claim 85 (New): The plant of claim 84 wherein the desired trait is herbicide resistance and the resistance is conferred to an herbicide selected from the group consisting of: imidazolinone, sulfonylurea, glyphosate, glufosinate, L-phosphinothricin, triazine and benzonitrile.

Claim 86 (New): The plant of claim 84 wherein the desired trait is insect resistance and the insect resistance is conferred by a transgene encoding a *Bacillus thuringiensis* endotoxin.

Claim 87 (New): The plant of claim 84 wherein the desired trait is male sterility and the trait is conferred by a cytoplasmic nucleic acid molecule that confers male sterility.

Claim 88 (New): A method of modifying fatty acid metabolism, phytic acid metabolism or carbohydrate metabolism in maize inbred line PH3PG comprising:

(a) crossing PH3PG plants grown from PH3PG seed, representative seed of which has been deposited under ATCC Accession No. PTA-4260, with plants of another maize line that comprise a nucleic acid molecule encoding an enzyme selected from the group consisting of phytase, stearyl-ACP desaturase, fructosyltransferase, levansucrase, alpha-amylase, invertase and starch branching enzyme;

(b) selecting F1 progeny plants that have said nucleic acid molecule to produce selected F1 progeny plants;

(c) crossing the selected progeny plants with the PH3PG plants to produce backcross progeny plants;

(d) selecting for backcross progeny plants that have said nucleic acid molecule and physiological and morphological characteristics of maize inbred line PH3PG listed in Table 1 to produce selected backcross progeny plants; and

(e) repeating steps (c) and (d) three or more times in succession to produce selected fourth or higher backcross progeny plants that comprise said nucleic acid molecule and have all of the physiological and morphological characteristics of maize inbred line PH3PG listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.

Claim 89 (New): A plant produced by the method of claim 88, wherein the plant comprises the nucleic acid molecule and has all of the physiological and morphological characteristics of maize inbred line PH3PG listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.